CLAIMS:

What is claimed is:

1. A method comprising:

comparing the size of at least a portion of received content to a capacity of a single contiguous location within at least one memory channel to meet a given throughput; and

determining whether to distribute the at least portion of received content across the at least one memory channel based, at least in part, on the comparison.

2. A method according to claim 1, wherein the at least portion of received content is distributed across a plurality of non-contiguous locations within the at least one memory channel if the at least portion of received content exceeds the capacity of a single contiguous location within the at least one memory channel to meet a given throughput.

3. A method according to claim 1, wherein the at least portion of received content is a packet meta data.

4. A method according to claim 2, wherein the capacity of the single contiguous location within the at least one memory channel to meet the given throughput is less than 32 bytes.

5. A method according to claim 4, wherein a memory size of the packet meta data is at least 32 bytes.

6. A method according to claim 5, wherein the determination to distribute across a plurality of non-contiguous locations within the at least one memory channel is based, at least in part, on whether the packet meta data can be distributed in a way to meet the given throughput.

7. A method according to claim 1, wherein the given throughput is communication channel speed.

8. A method according to claim 1, wherein the method is implemented in a network processor.

9. A method according to claim 1, wherein the determining whether to distribute occurs at start-up.

10. A method comprising:

accessing at least a portion of received content distributed across at least one memory channel, wherein the at least portion of received content is read simultaneously across the at least one memory channel; and

combining the at least portion of received content as if the at least portion of received content were distributed to a single contiguous location within the at least one memory channel.

11. A method according to claim 10, further comprising:

presenting the at least portion of received content to an agent.

12. A method according to claim 11, wherein the at least portion of received content is a packet meta data.

13. A method according to claim 12, wherein the packet meta data includes a packet handle.

14. A method according to claim 13, wherein the packet handle is 1:1 mapped to the packet meta data distributed across the at least one memory channel to facilitate the accessing of the packet meta data distributed across the at least one memory channel.

15. A method according to claim 14, wherein combining the packet meta data distributed across the at least one memory channel is accomplished by temporarily storing the recombined packet meta data in local memory.

16. A method according to claim 15, wherein presenting the packet meta data is accomplished by making the recombined packet meta data, temporarily stored in local memory, available to an agent as if it were a cohesive self-contained unit.

17. A method according to claim 11, wherein the method is implemented in a network processor.

18. An apparatus comprising:

a memory, including at least one memory channel; and

a routing manager, communicatively coupled with the memory, to distribute at least a portion of received content to the at least one memory channel to meet a given throughput.

19. An apparatus according to claim 18, wherein the routing manager distributes the at least portion of received content by storing the at least portion of received content in a plurality of non-contiguous locations within the at least one memory channel.

20. An apparatus according to claim 18, the apparatus further comprising:

a memory to store content, at least a subset of which is executable content; and

a control logic, communicatively coupled with the memory, to selectively execute at least a subset of the executable content, to implement an instance of the routing manager.

21. An apparatus according to claim 20, wherein the control logic is implemented in a network processor.

22. An apparatus according to claim 18, wherein the memory is static random access memory.

23. An apparatus comprising:

a memory, including at least one memory channel; and

an access manager, communicatively coupled with the memory, to read at least a portion of received content from the at least one memory channel and to combine the at least portion of

received content as if the at least portion of received content were distributed to a single contiguous location within at least one memory channel.

24. An apparatus according to claim 23 wherein the access manager presents the combined at least portion of received content to an agent.

25. An apparatus according to claim 23 wherein the at least portion of received content is packet meta data which includes a packet handle, the packet handle 1:1 mapped to the packet meta data.

26. An apparatus according to claim 25 wherein the access manager uses the packet handle to locate and read the packet meta data from the at least one memory channel.

27. An apparatus according to claim 23, the apparatus further comprising:

a memory to store content, at least a subset of which is executable content; and

a control logic, communicatively coupled with the memory, to selectively execute at least a subset of the executable content, to implement an instance of the access manager.

28. An apparatus according to claim 23, wherein the control logic is implemented in a network processor.

29. An apparatus according to claim 23, wherein the memory is static random access memory.

30. A system comprising:

a memory, including at least one memory channel; and

a routing manager, coupled with the memory to selectively distribute at least a portion of received content to the at least one memory channel based, at least in part, on whether the at least portion of received content exceeds a capacity of a single contiguous location within the at least one memory channel to meet a given throughput.

31. A system according to claim 30, wherein the routing manager distributes the at least portion of received content by storing the at least portion of received content in a plurality of non-contiguous locations within the at least one memory channel.

32. A system according to claim 30, wherein the capacity of a single contiguous location within the at least a single memory channel is less than 32 bytes.

33. A system according to claim 30, wherein the routing manager is implemented in a network processor.

34. A system according to claim 30, wherein the memory is static random access memory.

35. A storage medium comprising content, which, when executed by a machine, causes the machine to:

compare the size of at least a portion of received content to a capacity of a single contiguous location within at least one memory channel to meet a given throughput; and

determine whether to distribute the at least portion of received content across the at least one memory channel, based at least in part, on the comparison.

36. A storage medium according to claim 35, wherein the at least portion of received content is distributed across a plurality of non-contiguous locations within the at least one memory channel if the at least portion of received content exceeds the capacity of a single contiguous location within the at least one memory channel to meet a given throughput.

37. A storage medium according to claim 36, wherein the at least portion of received content is packet meta data.

38. A storage medium according to claim 37, wherein the capacity of the single contiguous location within the at least one memory channel to meet the given throughput is less than 32 bytes.

39. A storage medium according to claim 38, wherein a memory size of the packet meta data is at least 32 bytes.

40. A storage medium according to claim 39, wherein the determination to distribute across a plurality of non-contiguous locations within the at least one memory channel is based, at least in part, on whether the packet meta data can be distributed in a way to meet the given throughput.

41. A storage medium according to claim 35, wherein the given throughput is communication channel speed.

42. A storage medium comprising content, which, when executed by a machine, causes the machine to:

access at least a portion of received content distributed across at least one memory channel, wherein the at least portion of received content is read simultaneously across the at least one memory channel; and

combine the at least portion of received content, as if the at least portion of received content was distributed to a single contiguous location within the at least one memory channel.

43. A storage medium according to claim 42, further comprising:

presenting the at least portion of received content to an agent.

44. A storage medium according to claim 43, wherein the at least portion of received content is a packet meta data

45. A storage medium according to claim 44, wherein the packet meta data includes a packet handle.

46. A storage medium according to claim 45, wherein the packet handle is 1:1 mapped to the packet meta data distributed across the at least one memory channel to facilitate the accessing of the packet meta data distributed across the at least one memory channel.

47. A storage medium according to claim 46, wherein combining the packet meta data distributed across the at least one memory channel is accomplished by temporarily storing the recombined packet meta data in local memory.

48. A storage medium according to claim 47, wherein presenting the packet meta data is accomplished by making the recombined packet meta data, temporarily stored in local memory, available to an agent as a cohesive self-contained unit.